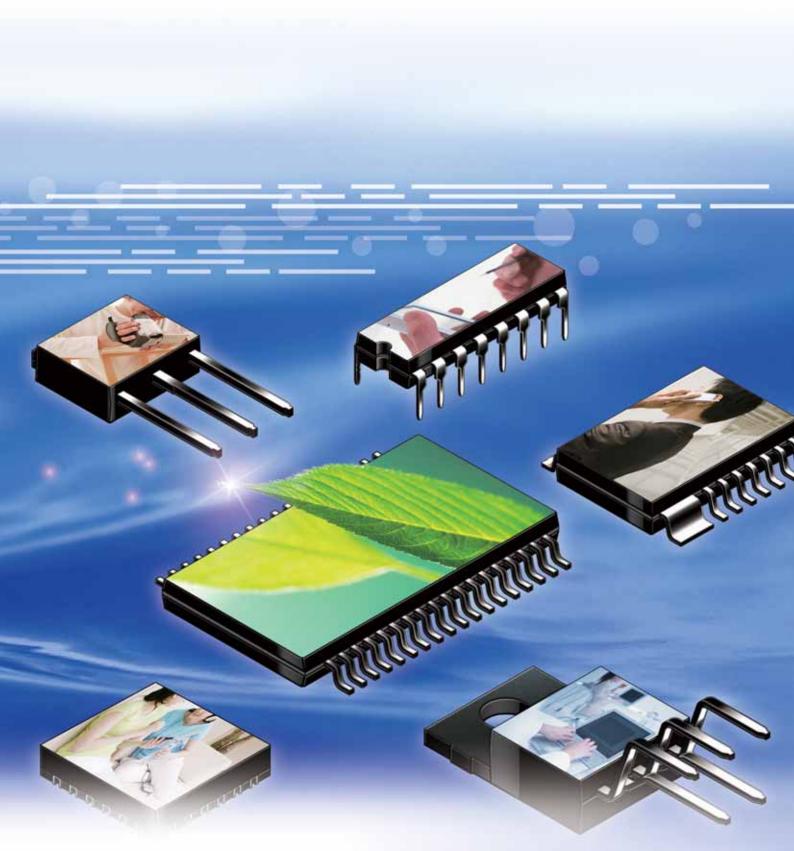




Power Supply ICs, LED Driver ICs

2008-6



SANYO Semiconductor Co., Ltd.

ower sup

For both analog and digital systems, SANYO multifunction regulator IC products, support our customers' creation of the new wave of next generation in electronic products by providing extensive functionality and high reliability for all electronic devices.

Contemporary electronic equipment requires a wide range of high-level technologies to remain viable in today's competitive market. For example, cell phones require technologies that achieve stable operation at low input voltages, improved efficiency, and further miniaturization in the power supply system. Similarly, digital home appliances not only requires low-power/low-voltage operation and improved efficiency, but also low power consumption in standby mode to meet energy usage requirements and the ability to meet high-frequency radiation standards.

We at SANYO Semiconductor makes a point of grasping these needs as early as possible and developing ICs contributing to achieve improved system development and high level of integration based on our rich experience in general-purpose product technologies.

* The outer dimensions in this brochure are only reference values (typical values). They may change without notice due to modifications or improvements. At the time of product design or delivery, be sure to check with the delivery specifications or external dimension drawings of each device

- Any and all SANYO Semiconductor Co., Ltd. products described or contained herein are, with regard to "standard application", intended for the use as general electronics equipment (home appliances, AV equipment, communication device, office equipment, industrial equipment etc.). The products mentioned herein shall not be intended for use for any "special application" (medical equipment whose purpose is to sustain life, aerospace instrument, nuclear control device, burning appliances, transportation machine, traffic signal system, safety equipment etc.) that shall require extremely high level of reliability and can directly threaten human lives in case of failure or malfunction of the product or may cause harm to human bodies, nor shall they grant any guarantee thereof. If you should intend to use our products for applications outside the standard applications of our customer who is considering such use and/or outside the scope of our intended standard applications, please consult with us prior to the intended use. If there is no consultation or inquiry before the intended use, our customer shall be solely responsible for the use.
- Specifications of any and all SANYO Semiconductor Co.,Ltd. products described or contained herein stipulate the performance, characteristics, and functions of the described products in the independent state, and are not guarantees of the performance, characteristics, and functions of the described products as mounted in the customer's products or equipment. To verify symptoms and states that cannot be evaluated in an independent device, the customer should always evaluate and test devices mounted in the customer's products or equipment.
- SANYO Semiconductor Co.,Ltd. assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all SANYO Semiconductor Co., Ltd. products described or contained herein.
- products fail or malfunction with some probability. It is possible that these probabilistic failures or malfunction could give rise to accidents or events that could endanger human lives, trouble that could give rise to smoke or fire, or accidents that could cause damage to other property. When designing equipment, adopt safety measures so that these kinds of accidents or events cannot occur. Such measures include but are not limited to protective circuits and error prevention circuits for safe design, redundant design, and structural design.
- In the event that any or all SANYO Semiconductor Co.,Ltd. products described or contained herein are controlled under any of applicable local export control laws and regulations, such products may require the export license from the authorities concerned in accordance with the above law.
- No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or any information storage or retrieval system, or otherwise, without the prior written consent of SANYO Semiconductor Co.,Ltd.
- Any and all information described or contained herein are subject to change without notice due to product/technology improvement, etc. When designing equipment, refer to the "Delivery Specification" for the SANYO Semiconductor Co.,Ltd. product that you intend to use
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production
- Upon using the technical information or products described herein, neither warranty nor license shall be granted with regard to intellectual property rights or any other rights of SANYO Semiconductor Co., Ltd. or any third party. SANYO Semiconductor Co.,Ltd. shall not be liable for any claim or suits with regard to a third party's intellectual property rights which has resulted from the use of the technical information and products mentioned above

CONTENTS

Product Lineup

- DC-DC Converter (Control) ICs ------3
- DC-DC Converter (Control) ICs ------3 [Synchronous Rectification Type]
- AC-DC Converter (Control) ICs ------4
- Power Supply ICs ----- 4 for Single Lens Reflex Digital Cameras
- Power Supply ICs for Surveillance Cameras --- 4
- Power Supply ICs for Panels ------ 4
- System Power Supply ICs ----- 5 (for Portable Electronic Devices)
- System Power Supply ICs ----- 5 (for AV Electronic Devices)

Series Power Supply ICs6 to 9
Power Supply Switching ICs 9
Power ICs with a Watchdog Timer Function 10
Dual-Protection ICs 10
• Dual-Protection ICs 10, 11
(for Rechargeable Lithium-ion Batteries)
Rechargeable Battery Charge Control ICs 11
Dedicated Reset Function ICs 11
LED Driver ICs 11

SANYO Semiconductor Co.,Ltd. strives to supply high-quality high-reliability products, however, any and all semiconductor

Product Lineup

DC-DC Converter (Control) ICs

D	C-DC Co	nverter (Co	ontrol) ICs				●: New produ *: Devel	
	Туре No.	Туре	Input voltage	Output voltage	Channels	Power stages	Package	P
	LA5660M	Step up	1.8V to 14V	Programmable externally	1ch	External (NPN or NMOS)	MFP8(225mil)	
•	LV5803M	Step down	4.5V to 18V	Programmable externally	1ch	Built in	MFP8(225mil)	13
*	LV5807MA	Step down	4.5V to 18V	Programmable externally	1ch	Built in	SOP8J(200mil)	
•	LA5724M	Step down	4.5V to 28V	Programmable externally/0.6A	1ch	Built in	MFP8(225mil)	
•	LA5744	Step down	4.5V to 28V	Programmable externally/3A	1ch	Built in	220-5HK	
•	LA5744MP	Step down	4.5V to 28V	Programmable externally/3A	1ch	Built in	SMP5	
•	LA5744TP	Step down	4.5V to 28V	Programmable externally/3A	1ch	Built in	TP5HFA	
•	LA5774	Step down	4.5V to 28V	Programmable externally/3A	1ch	Built in	220-5H	12
•	LA5774MP	Step down	4.5V to 28V	Programmable externally/3A	1ch	Built in	SMP5	12
•	LA5779	Step down	4.5V to 28V	Programmable externally/3A	1ch	Built in	220-5H	12
•	LA5779MP	Step down	4.5V to 28V	Programmable externally/3A	1ch	Built in	SMP5	12
•	LA5779N	Step down	4.5V to 28V	Programmable externally/3A	1ch	Built in	220-5HK	
•	LA5734MP	Step down	4.5V to 32V	Programmable externally/3A	1ch	Built in	SMP5	12
•	LA5735M	Step down	4.5V to 32V	Programmable externally/0.6A	1ch	Built in	MFP8(225mil)	
*	LA5755	Step down	4.5V to 32V	Programmable externally	1ch	Built in	TO220	
*	LA5756	Step down	4.5V to 32V	Programmable externally	1ch	Built in	TO220	
*	LV5745GP	Step down	4.5V to 6V	Programmable externally	3ch	External (PMOS)	VCT28(3.0×3.0)	
•	LV5781	Step down	4.5V to 6V	Programmable externally	1ch	Built in	HSSOP14(225mil)	
	LA5771MP	Step down	5.5V to 28V	3.3V/3A	1ch	Built in	SMP5	12
•	LA5771	Step down	5.5V to 32V	3.3V/3A	1ch	Built in	220-5H	12
	LA5772MP	Step down	7V to 28V	5V/3A	1ch	Built in	SMP5	12
•	LA5772	Step down	7V to 32V	5V/3A	1ch	Built in	220-5H	12
*	LV5746V	Step down	8V to 22V	Programmable externally	2ch	External (PMOS)	SSOP20(225mil)	
•	LA5777	Step down	8V to 28V	5V/3A	1ch	Built in	220-5H	12
•	LA5777MP	Step down	8V to 28V	5V/3A	1ch	Built in	SMP5	12
*	LV5806MA	Step down	8V to 28V	Programmable externally	1ch	Built in	SOP8J(200mil)	
*	LV5808M	Step down	8V to 28V	Programmable externally	1ch	Built in	MFP8(225mil)	
•	LV5743V	Step down	8V to 33V	Programmable externally	2ch	External (PMOS)	SSOP16(225mil)	
	LA5664M	Step up/down	4V to 5.6V	5V/250mA	1ch	Built in	MFP14S(225mil)	
	LV5051T	Step up/down+ Linear regulator	1.5V to 4.4V 2V to 8.0V	2.5V (Step up/down) 2.8V/3.9A (Linear)	3ch	Built in	TSSOP24(225mil)	
	TN5D41A	Step down	10V to 40V	5V/5A	1ch	Built in (PMOS)	TO-220FI5H-HB	14
*	TN8D41A	Step down	10V to 40V	5V/8A	1ch	Built in (PMOS)	TO-220FI5H-HB	14
•	TN5D51A	Step down	20V to 48V	12V/5A	1ch	Built in (PMOS)	TO-220FI5H-HB	14
*	TN8D51A	Step down	20V to 48V	12V/8A	1ch	Built in (PMOS)	TO-220FI5H-HB	14
*	TN5D61A	Step down	30V to 48V	24V/5A	1ch	Built in (PMOS)	TO-220FI5H-HB	14

DC-DC Converter (Control) ICs [Synchronous Rectification Type]

Input voltage Output voltage Channels Power stages Type No. Package Туре P 7.5V to 16V • LV5044V External (NMOS) Step down Programmable externally 2ch SSOP30(275mil) 4.5V to 6V 7.5V to 16V • LV5050V Step down Programmable externally 1ch External (NMOS) SSOP20(225mil) 15 4.5V to 6V * LV5747TT Step down 8V to 42V External (NMOS) MSOP12(150mil) Programmable externally 1ch * LV5749V Step down 8V to 42V Programmable externally 1ch External (NMOS) SSOP16(225mil) ✤ LV5741 Step down 8V to 42V DIP16(300mil) Programmable externally 1ch External (NMOS)

AC-DC Converter (Control) ICs

•: New products and

Type No.	Package	Functions	V _{CC} (V)	Features	Ρ
LA5648	DIP8(300mil)	RCC/separately-excited fly-back AC-DC converter controller	30	UVLO, primary side PbyPOCP, secondary side timer type OCP	16

Power Supply ICs for Single Lens Reflex Digital Cameras

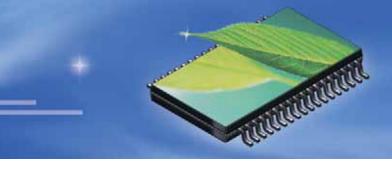
	10-17 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	- U		0		*: Deve	topment
Type No.	Туре	Input voltage	Output voltage	Channels	Power stages	Package	P
LA5680T	Mixed step up/ step down	1.5V to 12V	Programmable externally	6ch (Step up 4, down 2)	External (NPN, PNP or NMOS, PMOS)	TQFP48J(7×7)	
• LA5683T	Mixed step up/ step down	1.8V to 8V	Programmable externally	4ch (Step up 2, down 2)	External (NPN, PNP or NMOS, PMOS)	TSSOP36(275mil)	
LA5679T	Mixed step up/ step down	1.8V to 11V	Programmable externally	3ch (Step up 1, down 2)	External (NPN, PNP or NMOS, PMOS)	TSSOP36(275mil)	
LA5669T	Multiple power supply	1.8V to 11V	Programmable externally	3ch	External	TSSOP36(275mil)	
• LV5603T	Multiple power supply	3V to 15V	Programmable externally	6ch (Step up 2, down 4)	External	TQFP48J(7×7)	17
* LV5655	Multiple power supply	3V to 15V	Programmable externally	3ch (Step up 1, down 2)	External	SSOP24(225mil)	18
• LV5604T	Multiple power supply	3V to 15V	Programmable externally	8ch (Step up 3, down 5)	External	TQFP64J(7×7)	19

Power Supply ICs for Surveillance Cameras

				ameras			∦ : Develo	opment
	Туре No.	Туре	Input voltage	Output voltage	Channels	Power stages	Package	P
•	LA5795T	Charge pump step-up	13.5V to 28V	Programmable externally	1ch	Built in	MSOP10(150mil)	
•	LA5797M	Charge pump step-up	7.5V to 28V	Programmable externally	1ch	Built in (External diode)	MFP8(225mil)	
*	LV5606LP	± Charge pump step-up	3V to 3.45V	Programmable externally	2ch	Built in	VQLP32(4.0×4.0)	
*	LV5606V	± Charge pump step-up	3V to 3.45V	Programmable externally	2ch	Built in	SSOP30(275mil)	
•	LV5608LP	± Charge pump step-up	3V to 3.45V	15V, -7.5V	2ch	Built in	VCT24(3.5×3.5)	
*	LV56081GP	± Charge pump step-up	3V to 3.45V	15V, -5.5V	2ch	Built in	VCT24(3.5×3.5)	
•	LV5609LP	V driver for CCD	Ratings are listed on	separate datasheet	5ch	Built in	VCT24(3.5×3.5)	
•	LV5609V	V driver for CCD	Ratings are listed on	separate datasheet	5ch	Built in	SSOP20(225mil)	

Power Supply ICs for Panels

_						, Deretop	
Type No.	Туре	Input voltage	Output voltage	Channels	Power stages	Package	Ρ
* LA5661M	Backlight inverter	1.8V to 14V	Programmable externally	1ch	External	MFP10S(225mil)	
• LA5663V	Phase control voltage inverter	4.5V to 23V	Programmable externally (Current)	1ch	External	SSOP24(275mil)	



•: New products and * Developmen

•: New products and

•: New products and *: Development



System Power Supply ICs (for Portable Electronic Devices)

Series Power Supply ICs

Type No. LA5160AM LV5105FN	Regula	tor outpu	t voltage/	current	Absolute max	ximum ratings		
	1	2	3	4	Input voltage (V)	Total power dissipation (W)	Package	Functions/Features
LA5160AM	5V/ 100mA				40	0.8	MFP8(225mil)	Low consumption current at output-off time with built-in ON/OFF function.
LV5105FN	2.8V/ 150mA	2.6V/ 100mA	2.85V/ 50mA	3V/ 50mA	5.9	0.44	VQFN48(7×7)	Built-in reset circuit × 2, 3-color LED driver, front LED driver, and microphone bias output.
LV5103LP	1 1.5V/ 30mA 5 3.3V/ 150mA	2 2.85V/ 200mA 6 1.5V/ 200mA	3 2.85V/ 150mA 7 1.8V/ 150mA	4 3.1V/ 450mA 8 1.2V/ 500mA	3.2 to 4.5	1.1*	VQLP40(5.0×5.0)	Built-in step-down DC-DC converter × 1, series regulator × 8, and short-circuit protection circuit *Ratings mounted on board: 40mm×50mm×0.8mm, Glass epoxy 4-layer (2S2P) board

System Power Supply ICs (for AV Electronic Devices)

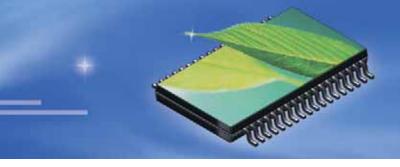
	Regu	lator ou	itput vo	Itage/c	urrent		maximum ings			Fun	ctions/Features	
Type No. LA5632 LA5643 LA5643 LA5624H LA5635H LA5613 LA5601 LA5617	1	2	3	4	5	Input voltage (V)	Total power dissipation (W)	Package	ON/OFF function	Reset output	Notes	
LA5632	3.3V/ 60mA	3.3V/ 150mA	5V/ 1000mA	5V/ 100mA		14	2.3	SIP12H	•	•	With power ON/OFF detection circuit.	
LA5643	3.5V/ 150mA	5V/ 1000mA	5V/ 100mA			14	2.0	SIP13H		•		
	1	2	3	4	5							
	5V/ 50mA	10V/*	8V/ 100mA	8V/ 30mA	8V/ 150mA						10V regulator (when used	
LA5624H	6	7	8	9	10			HSOP28HC			with external PNP transistor) with standby function (on/off	
	8V/	5V/	5V/	SW/	SW/	24	2.01	(375mil)	•	•	control).	
	100mA	100mA	300mA	100mA	100mA			(07 01111)			control).	
	11	12	13	14							* Within ASO of external TR	
	OP1-C/	OP2-C/ 10mA	OP3-C/ 10mA	OP4-C/ 10mA								
	10mA	10MA	10mA	10MA	5							┼
	5V/	2	8V/	4 8V/	8V/							
	50mA	10V/*	200mA	30mA	150mA						10V regulator (when used	
	6	7	8	9	10						with external PNP transistor)	
LA5635H	8V/	5V/	5V/	SW/	SW/	24	2.01	HSOP28HC	•	•	with standby function (on/off	
	100mA	100mA	300mA	100mA	500mA			(375mil)			control).	
	11	12	13	14							* Within ASO of external TR	
	OP1-C/	OP2-C/	OP3-C/	OP4-C/								
	10mA	10mA	10mA	10mA								
1 4 5 9 / 9	5.1V/	SW/						010405	_		11.3V/0.3A ripple filter	
LA5613	700mA	300mA				14	1.7	SIP10F	•		switching regulator control amplifier built in.	
LA5601	5.2V/	3.4V/				15	1.0	DIP10S			Built-in driver	t
	250mA	10mA				15	1.0	(300mil)				
	7.5V/	-7.5V/				±18	2.0	SIP10F	•		±Voltage tracking regulator	
	500mA	-500mA					2.0					+
LA5605	7.5V/	9V/	5V/			24	2.0	SIP13H			Built-in AC standby and	
LA5635H LA5613 LA5601 LA5617	500mA	60mA	10mA	5)//				-			power detection functions.	+
	15.7V/	12V/	9V/	5V/		35	4.3	SIP14H	•			
	350mA	200mA	150mA	500mA								1

		Output							0	utp	out	vol	tag	e (V)								olute n ratings		
Type No.	Туре	Current (A)	1.8	2	2.5	3	3.3	3.4	3.5	4	5	6	7	8	9	10	12	15	18	20	24	Input	Total power dissipation (W)	Package	Features
LA5002M	Positive voltage	0.06		•																		12	0.3	MFP8 (225mil)	2V low-saturation voltage regulator, 2V output voltage, 60mA output current, low-saturation (0.2V typ) series regulator, RF noise suppression
LA5003	Positive voltage	0.06				•																12	0.56	SIP4H	3V low-saturation voltage regulator, 3V output voltage, 60mA output current, low-saturation (0.2V typ) series regulator, RF noise suppression
LA5003M	Positive voltage	0.06				•																12	0.3	MFP8 (225mil)	3V low-saturation voltage regulator, SOP (MFP) version of LA5003
LA5004	Positive voltage	0.06								•												12	0.56	SIP4H	4V low-saturation voltage regulator, 4V output voltage, 60mA output current, low-saturation (0.2V typ) series regulator, RF noise suppression
LA5004M	Positive voltage	0.06								•												12	0.3	MFP8 (225mil)	4V low-saturation voltage regulator, SOP (MFP) version of LA5004
LA5005	Positive voltage	0.06									•											12	0.56	SIP4H	5V low-saturation voltage regulator, 5V output voltage, 60mA output current, low-saturation (0.2V typ) series regulator, RF noise suppression
LA5005M	Positive voltage	0.06									•											12	0.3	MFP8 (225mil)	5V low-saturation voltage regulator, SOP (MFP) version of LA5005
LA5006M	Positive voltage	0.06										•										16	0.3	MFP8 (225mil)	6V low-saturation voltage regulator, 6V output voltage, 60mA output current, low-saturation (0.2V typ) series regulator, RF noise suppression
LA5008M	Positive voltage	0.06												•								16	0.3	MFP8 (225mil)	8V low-saturation voltage regulator, 8V output voltage, 60mA output current, low-saturation (0.2V typ) series regulator, RF noise suppression
LA5009M	Positive voltage	0.06													•							16	0.3	MFP8 (225mil)	9V low-saturation voltage regulator, 9V output voltage, 60mA output current, low-saturation (0.2V typ) series regulator, RF noise suppression
LA5010M	Positive voltage	0.06														•						16	0.3	MFP8 (225mil)	10V low-saturation voltage regulator, 10V output voltage, 60mA output current, low-saturation (0.2V typ) series regulator, RF noise suppression
L88M05T	Positive voltage	0.5									•											18	1.0	ТРЗН	5V low-saturation voltage regulator, 5V output voltage, 0.5A output current 0.4V (typ) minimum I/O voltage drop
L88M06T	Positive voltage	0.5										•										18	1.0	ТРЗН	6V low-saturation voltage regulator, 6V output voltage, 0.5A output current 0.4V (typ) minimum I/O voltage drop
L88M09T	Positive voltage	0.5													•							18	1.0	ТРЗН	9V low-saturation voltage regulator, 9V output voltage, 0.5A output curren 0.4V (typ) minimum I/O voltage drop
L88M12T	Positive voltage	0.5															•					18	1.0	ТРЗН	12V low-saturation voltage regulator, 12V output voltage, 0.5A output current 0.4V (typ) minimum I/O voltage drop

Series Power Supply ICs Continued from preceding page.

Series I Swer		Output							C	Dui	tpu	t v	oli	tag	e (V)									olute m ratings			
Туре No.	Туре	I .	1.8	2	2.5	3	3.3	3.4	1 3.5	5 4		5	6	7	8	9	10	12	2 1	5	18	20	24	Input	Total power	Package	Features	Ρ
L88M33T	Positive voltage	0.5					•																	18	1.0	ТРЗН	3.3V low-saturation voltage regulator, 3.3V output voltage, 0.5A output current, 0.4V (typ) minimum I/O voltage drop	
L88M35T	Positive voltage	0.5							•															18	1.0	ТРЗН	3.5V low-saturation voltage regulator, 3.5V output voltage, 0.5A output current, 0.4V (typ) minimum I/O voltage drop	
L88MS04T	Positive voltage	0.5																						18	1.0	TP5H	4V low-saturation voltage regulator with strobe pin, 4V output voltage, 0.5A output current, strobe pin, 0.4V (typ) minimum I/O voltage drop	
L88MS05T	Positive voltage	0.5																						18	1.0	TP5H	5V low-saturation voltage regulator with strobe pin, 5V output voltage, 0.5A output current, strobe pin, 0.4V (typ) minimum I/O voltage drop	
L88MS06T	Positive voltage	0.5											•											18	1.0	TP5H	6V low-saturation voltage regulator with strobe pin, 6V output voltage, 0.5A output current, strobe pin, 0.4V (typ) minimum I/O voltage drop	
L88MS08T	Positive voltage	0.5													•									18	1.0	TP5H	8V low-saturation voltage regulator with strobe pin, 8V output voltage, 0.5A output current, strobe pin, 0.4V (typ) minimum I/O voltage drop	
L88MS09T	Positive voltage	0.5														•								18	1.0	TP5H	9V low-saturation voltage regulator with strobe pin, 9V output voltage, 0.5A output current, strobe pin, 0.4V (typ) minimum I/O voltage drop	
L88MS12T	Positive voltage	0.5																						18	1.0	TP5H	12V low-saturation voltage regulator with strobe pin, 12V output voltage, 0.5A output current, strobe pin, 0.4V (typ) minimum I/O voltage drop	
L88MS33T	Positive voltage	0.5					•																	18	1.0	TP5H	Low-saturation voltage regulator with on/off function, 3.3V output voltage, 0.5A output current, strobe pin, 0.4V (typ) minimum I/O voltage drop	
L88MS34T	Positive voltage	0.5						•	1															18	1.0	TP5H	3.4V low-saturation voltage regulator with strobe pin, 3.4V output voltage, 0.5A output current, strobe pin, 0.4V (typ) minimum I/O voltage drop	
L88R05C	Positive voltage	1.0																						18	2.75	220-5H	4.5V low-saturation voltage regulator with reset pin, 5V output voltage, 1A output current, reset pin, 0.5V (typ) minimum I/O voltage drop	
L88R05D	Positive voltage	1.0																						18	2.75	220-5H	4.2V low-saturation voltage regulator with reset pin, 5V output voltage, 1A output current, reset pin, 0.5V (typ) minimum I/O voltage drop	
L88R05E	Positive voltage	1.0																						18	2.75	220-5H	3.9V low-saturation voltage regulator with reset pin, 5V output voltage, 1A output current, reset pin, 0.5V (typ) minimum I/O voltage drop	

Series Power Supply ICs Output voltage (V) Output Type No. Type Current (A) 1.8 2 2.5 3 3.3 3.4 3.5 4 5 6 7 8 9 Positive L78LR05 0.15 voltage Positive L78M05T 0.5 voltage Positive L78M06T 0.5 voltage Positive L78M07T 0.5 \bullet voltage Positive L78M08T 0.5 voltage Positive L78M09T 0.5 voltage Positive L78M10T 0.5 voltage Positive L78M12T 0.5 voltage Positive L78M15T 0.5 voltage Positive L78M18T 0.5 voltage Positive L78M20T 0.5 voltage Positive L78M24T 0.5 voltage Positive L78MG 0.5 voltage Positive L780S05 1.0 \bullet voltage Positive L780S08 1.0 voltage Positive L780S09 1.0 voltage Positive L780S10 1.0 voltage



						Abs	olute			
			1				m ratings		- .	
10	12	15	18	20	24	Input voltage (V)	Total power dissipation (W)	Package	Features	Ρ
						25	1.0	TP5H	5V voltage regulator with reset pin, 5V output voltage, 150mA output current, reset pin	
						35	1.0	ТРЗН	5V 0.5A 3-pin voltage regulators, 5V output voltage, 500mA output current, 1.0W power dissipation	
						35	1.0	ТРЗН	6V 0.5A 3-pin voltage regulators, 6V output voltage, 500mA output current, 1.0W power dissipation	
						35	1.0	ТРЗН	7V 0.5A 3-pin voltage regulators, 7V output voltage, 500mA output current, 1.0W power dissipation	
						35	1.0	ТРЗН	8V 0.5A 3-pin voltage regulators, 8V output voltage, 500mA output current, 1.0W power dissipation	
						35	1.0	ТРЗН	9V 0.5A 3-pin voltage regulators, 9V output voltage, 500mA output current, 1.0W power dissipation	
•						35	1.0	ТРЗН	10V 0.5A 3-pin voltage regulators, 10V output voltage, 500mA output current, 1.0W power dissipation	
	•					35	1.0	ТРЗН	12V 0.5A 3-pin voltage regulators, 12V output voltage, 500mA output current, 1.0W power dissipation	
		•				35	1.0	ТРЗН	15V 0.5A 3-pin voltage regulators, 15V output voltage, 500mA output current, 1.0W power dissipation	
			•			35	1.0	ТРЗН	18V 0.5A 3-pin voltage regulators, 18V output voltage, 500mA output current, 1.0W power dissipation	
				•		35	1.0	ТРЗН	20V 0.5A 3-pin voltage regulators, 20V output voltage, 500mA output current, 1.0W power dissipation	
					•	35	1.0	ТРЗН	24V 0.5A 3-pin voltage regulators, 24V output voltage, 500mA output current, 1.0W power dissipation	
						35	1.2	SIP4H	Variable type 4-pin 500mA constant voltage power supply, 35V/500mA, Pd: 1.2W	
						35	1.75	220-5H	1A general-purpose voltage regulator, 5V output voltage, 1A output current, strobe pin, thermal protection and overcurrent limiter circuits	
						35	1.75	220-5H	1A general-purpose voltage regulator, 8V output voltage, 1A output current, strobe pin, thermal protection and overcurrent limiter circuits	
						35	1.75	220-5H	1A general-purpose voltage regulator, 9V output voltage, 1A output current, strobe pin, thermal protection and overcurrent limiter circuits	
•						35	1.75	220-5H	1A general-purpose voltage regulator, 10V output voltage, 1A output current, strobe pin, thermal protection and overcurrent limiter circuits Continued on next p	



Series Power Supply ICs Continued from preceding page.

		Output								Ou	ιtpι	utv	vol	tag	ie (V)								Abso maximun				
Type No.	Туре	Current (A)	1.8	3 2	2.	5 3	3.	.3 3.	4 3	3.5	4	5	6	7	8	9	1	0 ·	12	15	18	2	.0 2	Input	Total power	Package	Features	Ρ
L780S12	Positive voltage	1.0																(•					35	1.75	220-5H	1A general-purpose voltage regulator, 12V output voltage, 1A output current, strobe pin, thermal protection and overcurrent limiter circuits	
L780S15	Positive voltage	1.0																		•				35	1.75	220-5H	1A general-purpose voltage regulator, 15V output voltage, 1A output current, strobe pin, thermal protection and overcurrent limiter circuits	
L780S18	Positive voltage	1.0																			•)		35	1.75	220-5H	1A general-purpose voltage regulator, 18V output voltage, 1A output current, strobe pin, thermal protection and overcurrent limiter circuits	
L78MR05	Positive voltage	0.5									(•												35	1.75	220-5H	5V voltage regulator with reset pin, 5V output voltage, 0.5A output current	
L78MR06	Positive voltage	0.5											•											35	1.75	220-5H	6V voltage regulator with reset pin, 6V output voltage, 0.5A output current	
L78MR08	Positive voltage	0.5													•									35	1.75	220-5H	8V voltage regulator with reset pin, 8V output voltage, 0.5A output current	
L78MR12	Positive voltage	0.5																•	•					35	1.75	220-5H	12V voltage regulator with reset pin, 12V output voltage, 0.5A output current	
L78MS05J	Positive voltage	0.5									(•												35	1.75	220-5H	$5V$ voltage regulator with strobe pin, $5V$ output voltage, 0.5A output current, strobe pin (Features a low quiescent current of $35\mu\text{A})$	
L78MS05JSMP	Positive voltage	0.5										•												35	2.0	SMP5	$5V$ voltage regulator with strobe pin, $5V$ output voltage, 0.5A output current, strobe pin (Features a low quiescent current of $35\mu\text{A})$	
L79M05T	Negative voltage	0.5									(•												-35	1.0	ТРЗН	-5V 3 pin voltage regulator (minus output), –5V/0.5A, Pd: 1.0W	
L79M06T	Negative voltage	0.5											•											-35	1.0	ТР3Н	-6V 3 pin voltage regulator (minus output), –6V/0.5A, Pd: 1.0W	
L79M08T	Negative voltage	0.5													•									-35	1.0	ТРЗН	-8V 3 pin voltage regulator (minus output), -8V/0.5A, Pd: 1.0W	
L79M09T	Negative voltage	0.5														•								-35	1.0	ТРЗН	-9V 3 pin voltage regulator (minus output), -9V/0.5A, Pd: 1.0W	
L79M10T	Negative voltage	0.5																						-35	1.0	ТРЗН	-10V 3 pin voltage regulator (minus output), -10V/0.5A, Pd: 1.0W	
L79M12T	Negative voltage	0.5																	•					-35	1.0	ТРЗН	-12V 3 pin voltage regulator (minus output), –12V/0.5A, Pd: 1.0W	

Power Supply Switching ICs

	Deekoge		Input voltage (V	Applications	Б	
Туре No.	Package	V _{CC} 1	V _{CC} 2	V _{CC} 3	Applications	
LV5621LP	VCT16(2.6×2.6)	2.7 to 4.8	3	3.5 to 5.2	For DSCs and game machines	20
LV5622LP	VCT16(2.6×2.6)	2.7 to 4.8	3	3.5 to 5.2	For DSCs and game machines	
LV5625V	SSOP16(225mil)	1.45 to 3.4	3	3.5 to 5.2	For DSCs and game machines	

Power ICs with a Watchdog Timer Function

Туре No.	Absolute maximum ratings Input voltage (V)	Total power dissipation (W)	Package	Function reset logic output	Reset hold	5V regulator control	Regulator output ON/OFF	Edge detection	Watchdog time typ (Ct=2µF)	Р
LA5690D	41	0.5	DIP8(300mil)	Noninverted/Inverted		•		•	5ms	
LA5690S	41	0.5	SIP9	Noninverted/Inverted		•		•	5ms	
LA5691S	41	0.5	SIP9	Inverted		•	•	•	5ms	
LA5692D	41	0.5	DIP8(300mil)	Inverted	•	•		•	40ms	
LA5692M	41	0.37	MFP8(225mil)	Inverted	•	•		•	40ms	
LA5692S	41	0.5	SIP9	Inverted	•	•		•	40ms	
LA5693AM	41	0.37	MFP8(225mil)	Inverted	•	•			40ms	21
LA5693D	41	0.5	DIP8(300mil)	Inverted	•	•			40ms	21
LA5693M	41	0.5	MFP8(225mil)	Inverted	•	•			40ms	21

Dual-Protection ICs

	Absolute max	imum ratings			
Type No.	Input voltage (V)	Total power dissipation (W)	Package		
LA5695M	18	0.4	MFP14(225mil)		

Dual-Protection ICs (for Rechargeable Lithium-ion Batteries)

		Absolute maximu	um ratings					
Type N	0.	Input voltage (V)	Total power dissipation (W)	Package	Functions/Features	Ρ		
• LV5113	Г	-0.3 to +12	0.17	MSOP8(150mil)	2-cell Lithium-ion rechargeable battery protection IC			
• LV5122	Г	-0.3 to +12	0.17	MSOP8(150mil)	2-cell Lithium-ion rechargeable battery protection IC			
* LV51130	T	-0.3 to +12	0.17	MSOP8(150mil)	2-cell Lithium-ion rechargeable battery protection IC			
• LV5113	IT	-0.3 to +12	0.17	MSOP8(150mil)	2-cell Lithium-ion rechargeable battery protection IC			
* LV51132	2T	-0.3 to +12	0.17	MSOP8(150mil)	2-cell Lithium-ion rechargeable battery protection IC			
* LV5113	3T	-0.3 to +12	0.17	MSOP8(150mil)	2-cell Lithium-ion rechargeable battery protection IC			
• LV51134	1T	-0.3 to +12	0.17	MSOP8(150mil)	2-cell Lithium-ion rechargeable battery protection IC			
* LV5113	5T	-0.3 to +12	0.17	MSOP8(150mil)	2-cell Lithium-ion rechargeable battery protection IC			
* LV51136	6T	-0.3 to +12	0.17	MSOP8(150mil)	2-cell Lithium-ion rechargeable battery protection IC			
• LV51137	7T	-0.3 to +12	0.17	MSOP8(150mil)	2-cell Lithium-ion rechargeable battery protection IC			
• LV51138	3T	-0.3 to +12	0.17	MSOP8(150mil)	2-cell Lithium-ion rechargeable battery protection IC			
* LV5125	Г	-0.3 to +12	0.17	MSOP8(150mil)	2-cell Lithium-ion rechargeable battery protection IC			
* LV51110	TC	-0.3 to +7	0.35	SOT-23-6	1-cell Lithium-ion rechargeable battery protection IC			
* LV51110	DLF	-0.3 to +7	0.3	SON5(1.6×2.0)	1-cell Lithium-ion rechargeable battery protection IC			
* LV5111	IT	-0.3 to +7	0.35	SOT-23-6	1-cell Lithium-ion rechargeable battery protection IC			
* LV5111	1LF	-0.3 to +7	0.3	SON5(1.6×2.0)	1-cell Lithium-ion rechargeable battery protection IC			
* LV51112	2T	-0.3 to +7	0.35	SOT-23-6	1-cell Lithium-ion rechargeable battery protection IC			
* LV51112	2LF	-0.3 to +7	0.3	SON5(1.6×2.0)	1-cell Lithium-ion rechargeable battery protection IC			
* LV5111	ЗT	-0.3 to +7	0.35	SOT-23-6	1-cell Lithium-ion rechargeable battery protection IC			
* LV5111	BLF	-0.3 to +7	0.3	SON5(1.6×2.0)	1-cell Lithium-ion rechargeable battery protection IC			
* LV51114	4T	-0.3 to +7	0.35	SON5(1.6×2.0)	1-cell Lithium-ion rechargeable battery protection IC			

Functions/Features

Protection ICs for heating/cooling equipment and OA equipment, Builtin abnormal supply voltage detection circuit, driver output with built-in output delay circuit, can be controlled from 8 input pins.

•: New products and *: Development

Continued on next page.

DC-DC Converter (Control) ICs [Step down] LA5734MP/71/71MP/72/72MP/ 74/74MP/77/77MP/79/79MP

Dual-Protection ICs (for Rechargeable Lithium-ion Batteries)

Continued from preceding page	

•: New products and *: Development

		Absolute maximum ratings				
	Туре No.	Input voltage (V)	Total power dissipation (W)	Package	Functions/Features	
*	LV51114LF	-0.3 to +7	0.3	SON5(1.6×2.0)	1-cell Lithium-ion rechargeable battery protection IC	
*	LV51115T	-0.3 to +7	0.35	SOT-23-6	1-cell Lithium-ion rechargeable battery protection IC	
*	LV51115LF	-0.3 to +7	0.3	SON5(1.6×2.0)	1-cell Lithium-ion rechargeable battery protection IC	
*	LV51116T	-0.3 to +7	0.35	SOT-23-6	1-cell Lithium-ion rechargeable battery protection IC	
*	LV51116LF	-0.3 to +7	0.3	SON5(1.6×2.0)	1-cell Lithium-ion rechargeable battery protection IC	
*	LV51117T	-0.3 to +7	0.35	SOT-23-6	1-cell Lithium-ion rechargeable battery protection IC	
*	LV51117LF	-0.3 to +7	0.3	SON5(1.6×2.0)	1-cell Lithium-ion rechargeable battery protection IC	
*	LV51118T	-0.3 to +7	0.35	SOT-23-6	1-cell Lithium-ion rechargeable battery protection IC	
*	LV51118LF	-0.3 to +7	0.3	SON5(1.6×2.0)	1-cell Lithium-ion rechargeable battery protection IC	
*	LV51119T	-0.3 to +7	0.35	SOT-23-6	1-cell Lithium-ion rechargeable battery protection IC	
*	LV51119LF	-0.3 to +7	0.3	SON5(1.6×2.0)	1-cell Lithium-ion rechargeable battery protection IC	
•	LV51140T	-0.3 to +7	0.35	SOT-23-6	1-cell Lithium-ion rechargeable battery protection IC	
*	LV51140LF	-0.3 to +7	0.3	SON5(1.6×2.0)	1-cell Lithium-ion rechargeable battery protection IC	
•	LV51141T	-0.3 to +7	0.35	SOT-23-6	1-cell Lithium-ion rechargeable battery protection IC	
*	LV51141LF	-0.3 to +7	0.3	SON5(1.6×2.0)	1-cell Lithium-ion rechargeable battery protection IC	
*	LV51142T	-0.3 to +7	0.35	SOT-23-6	1-cell Lithium-ion rechargeable battery protection IC	
*	LV51142LF	-0.3 to +7	0.3	SON5(1.6×2.0)	1-cell Lithium-ion rechargeable battery protection IC	

Rechargeable Battery Charge Control ICs

₩: Development

Туре No.	Battery type	Absolute maximum ratings Input voltage (V)	Total power dissipation (W)		Functions/Features	P	
LA5636M	Lithium-ion, nickel-metal hydride	14.5	0.36	MFP10S(225mil)	Car battery DC/DC converter control IC, output voltage propor- tional to PWM input signal, for charging lithium-ion batteries	22	
✤ LA5645M	Charger	14.5	0.3	MFP8(225mil)	Constant-voltage, constant-current control IC, high precision reference voltage (1.5V+1%), input offset voltage (2mV max.)		

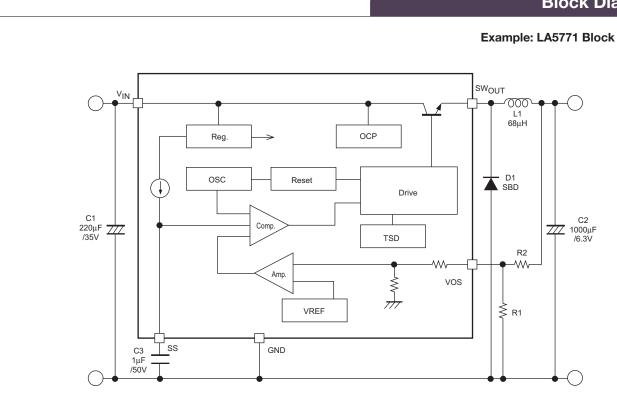
Dedicated Reset Function ICs

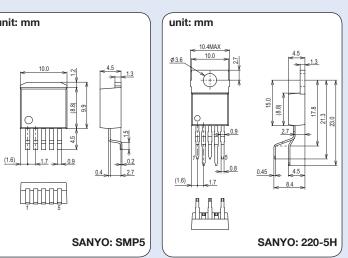
Type No.	Absolute maximum ratings Input voltage (V)	Total power dissipation (W)		Functions/Features	Р	
LA5623M	-0.3 to +12	0.3	MFP8(225mil)	2-system reset IC with built-in 1.25V, and 4.2V reference voltages, delay time 25ms, 50ms, 100ms, or 200ms switchable	23	

LED Driver ICs

1	ED Driver	ICS			•: New pro	oducts
	Type No.	Input voltage	Channels	Package	Circuit functions and applications	P
	LV5213LP	3.0 to 4.5	3ch	VCT16(2.6×2.6)	3-channel LED driver for cell phones	
	LV5215LF	3.0 to 4.5	4ch	VQFN12(2.0×2.0)	4-channel LED driver for cell phones	24
	LV5217GP	3.0 to 4.5	3ch	VCT16(2.6×2.6)	3-channel LED driver for cell phones	25

■ App	blications		unit: mm		unit	: mm	
Sepa	rately-excited step-down switching regul	ator				10.4MAX	45
● Lo as ● Hig ● 4 e ● Bu ● Bu	w-ESR capacitor with increased reliability the output smoothing capacitor (LA5774, gh efficiency external parts ilt-in reference oscillator (160kHz) ilt-in current limiter ilt-in thermal shutdown circuit ilt-in soft start circuit			2.7 (1.6)			
	5771/71MP/72/72MP/74/74MP)		:	SANYO: S	SMP5		SANYO: 220-5H
	I/OFF function (LA5734/77/77MP/79/79N						
Туре	Input voltage	-	t voltage	Channels	Power stages		Package
Step down	 4.5V to 28V (LA5774/74MP/79/79MP) 4.5V to 32V (LA5734MP) 5.5V to 28V (LA5771MP) 5.5V to 32V (LA5771) 7V to 28V (LA5772MP) 7V to 32V (LA5772) 8V to 28V (LA5777/77MP) 	(LA5734MP/74/ • 3.3V/3A (LA5771MP/ • 5V/3A	ole externally/3A 74PM/79/79MP) 71) /72/77/77MP)	1ch	Built in	• SMP5	2/74/77/79) P/71MP/72MP/ MP/79MP)





Block Diagram

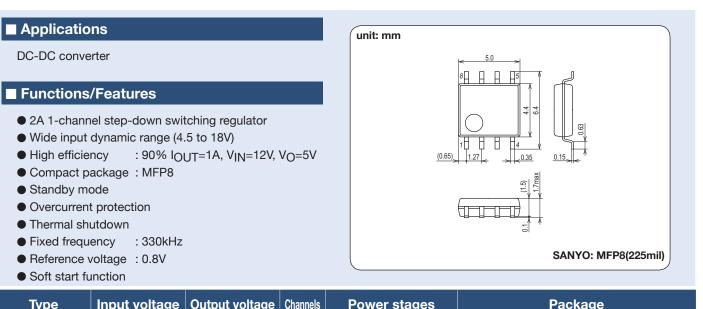


* For other block diagrams, refer to the datasheet.

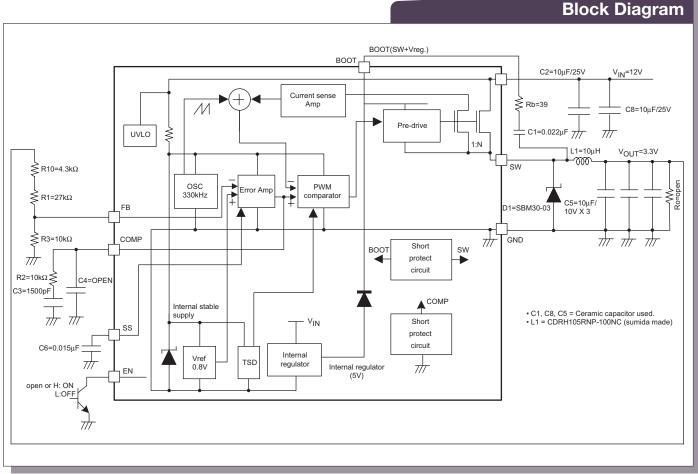
DC-DC Converter (Control) ICs [Step down]

LV5803M

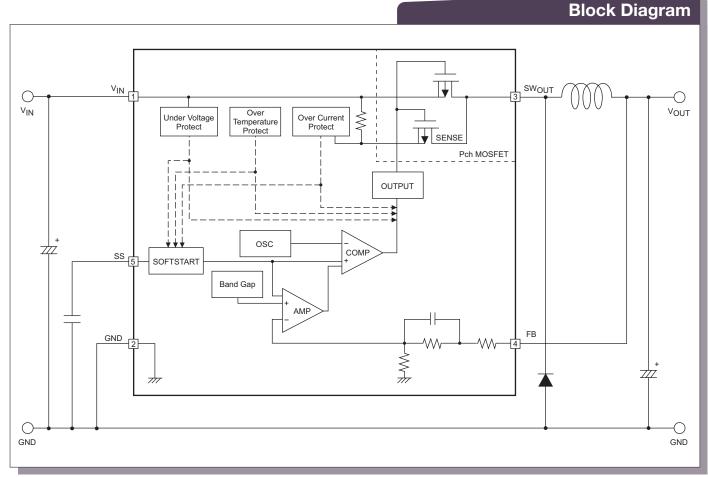
DC-DC Converter (Control) ICs [Separately-excited step-down] TN8D41A/51A, TN5D41A/51A/61A

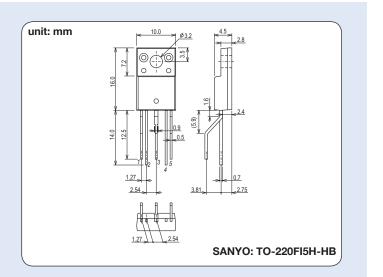


Type	input voitage		Undimens	rower stages	rackage
Step down	4.5V to 18V	Programmable externally	1ch	Built in	MFP8(225mil)



■ Ap	■ Applications							
Sep	Separately-excited step-down switching regulator							
∎ Fu	nctions/Features							
● H ● H ● Fi ● B ● B ● B	 Large current : I_O max 8A (TN8D41A/51A) : I_O max 5A (TN5D41A/51A/61A) High efficiency : Vertical-type P-channel power MOSFET built-in High withstand voltage : VIN max 57V Five external parts Built-in reference oscillator (150kHz) Built-in current limiter Built-in thermal shutdown circuit Built-in soft start circuit ON/OFF function (shared with soft start pin) 							
Туре	Input voltage	0						
Step down	10V to 40V (TN8D41A/TN5D41A) 20V to 48V (TN8D51A/TN5D51A) 30V to 48V (TN5D61A)	5V/5A (TN5D41A) 12V/5A (TN5D51A) 24V/5A (TN5D61A)						





Dutput voltage	Channels	Power stages	Package
n), 5V/8A (TN8D41A), n), 12V/8A (TN8D51A), n)	1ch	Built in (PMOS)	TO-220FI5H-HB

DC-DC Converter (Control) ICs [Synchronous rectification type]

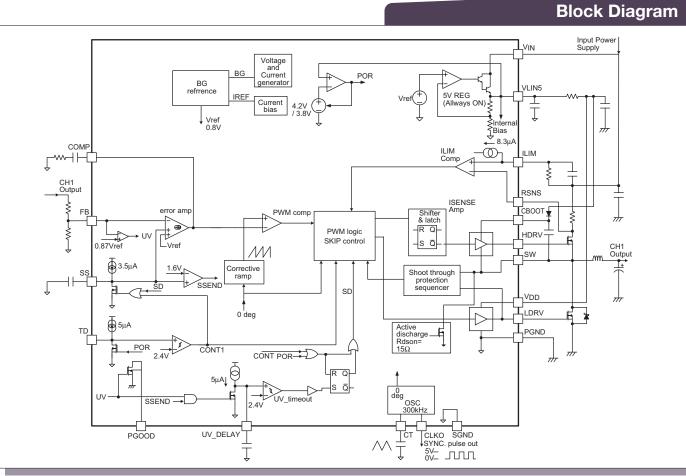
LV5050V

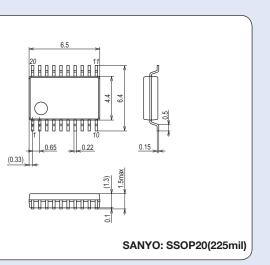
AC-DC Converter (Control) ICs



Applications unit: mm DC-DC converter Functions/Features 18<u>8888</u>8888 • Step-down DC-DC converter controller with 1-channel • Input UVLO circuit, overcurrent detection function, soft start/soft stop function, start-up delay circuit (0.33) • Output voltage monitor function (Under voltage protection with power good and timer latch) • Synchronized operation is possible between different devices

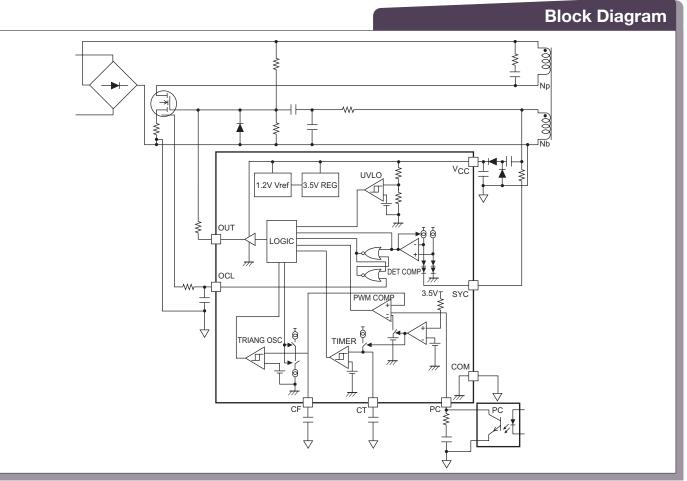
Туре	Input Voltage	Output Voltage	Channels	Power Stages	Package
Step down	7.5V to 16V 4.5V to 6V	Programmable externally	1ch	External (NMOS)	SSOP20(225mil)

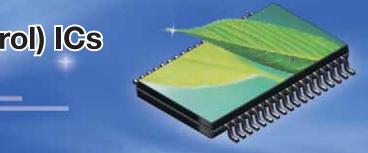


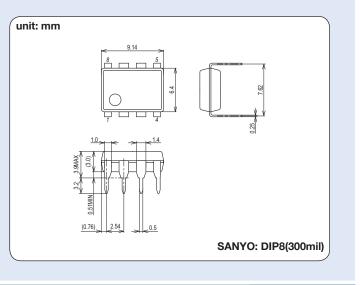


Applications
RCC power supply controller
Eurotions/Easturas
Functions/Features
 RCC power supply controller
 Overcurrent detection function
 Soft start function
 Input UVLO circuit
 Output overcurrent protection timer function
 Base winding voltage detection function

Functions	Vcc	Features	Package
RCC/separately-excited fly-back AC-DC converter controller	30	UVLO, primary side PbyPOCP, secondary side timer type OCP	DIP8(300mil)







Power Supply ICs for Single Lens Reflex Digital Cameras

LV5603T

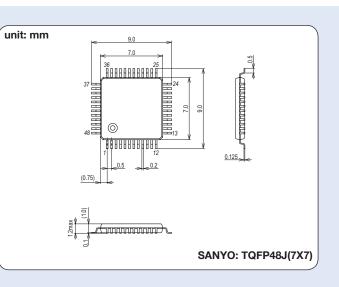
LV5655

Applications

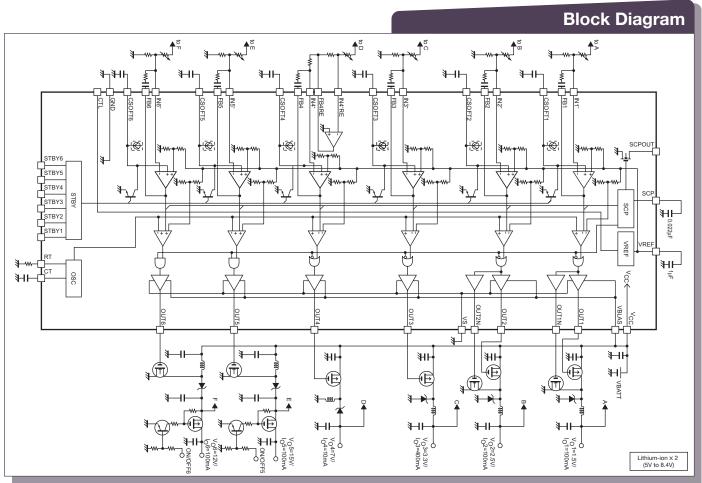
6-channel switching regulator control IC

Functions/Features

- Low voltage (3V minimum) operation
- Reference voltage precision: ± 1%
- Independent standby function for each of the 6 channels
- Is capable of driving MOS transistors
- Synchronous rectification: channels 1 and 2
- Supports inverting step-up operation



Туре	Input voltage	Output voltage	Channels	Power stages	Package
Multiple power supply	3V to 15V	Programmable externally	6ch (Step up 2, down 4)	External	TQFP48J(7×7)



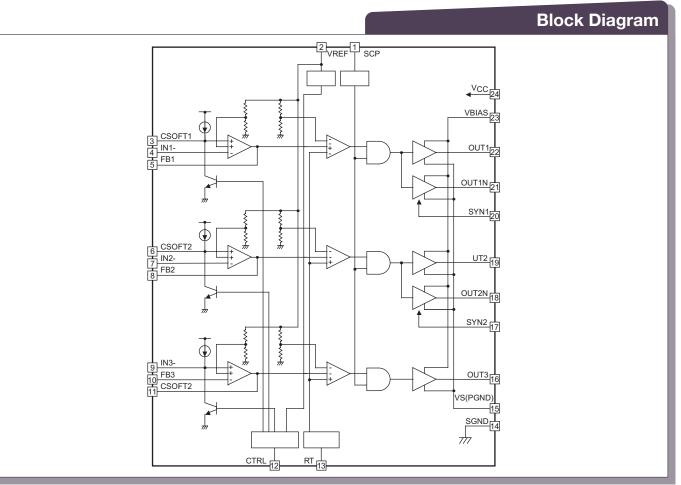
Applications

3-channel switching regulator control IC

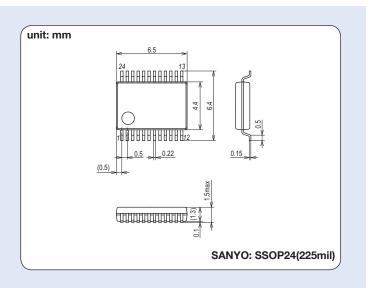
Functions/Features

- Low voltage (3V minimum) operation
- Reference voltage precision: ± 1%
- Built-in standby circuit
- Synchronous rectification: channels 1 and 2
- 3-channel independent soft start

Туре	Input voltage	Output voltage	Channels	Power stages	Package
Multiple power supply	3V to 15V	Programmable externally	3ch (Step up 1, down 2)	External	SSOP24(225mil)







Power Supply ICs for Single Lens Reflex Digital Cameras

LV5604T

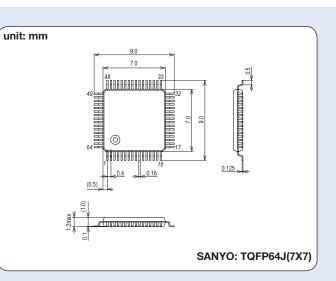
Power Supply Switching ICs LV5621LP

Applications

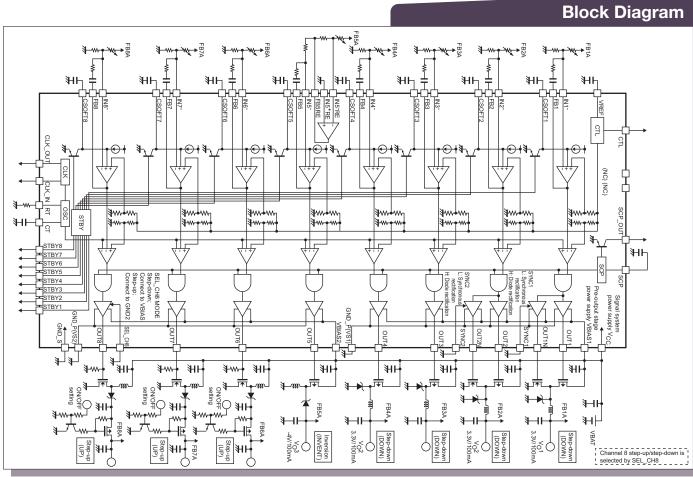
8-channel switching regulator control IC

Functions/Features

- Low voltage (3V minimum) operation
- Reference voltage precision: ± 1%
- Independent standby function for each of the 8 channels
- Is capable of driving MOS transistors
- \bullet Synchronous rectification: channels 1 and 2
- Supports inverting step-up operation



Туре	Input voltage	Output voltage	Channels	Power stages	Package
Multiple power supply	3V to 15V	Programmable externally	8ch (Step up 3, down 5)	External	TQFP64J(7×7)



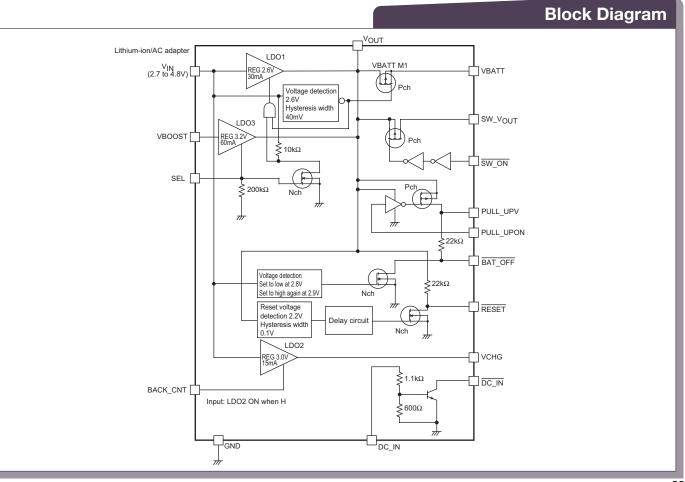
Applications

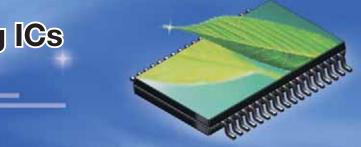
For digital still cameras Switching IC between main and backup power supplies

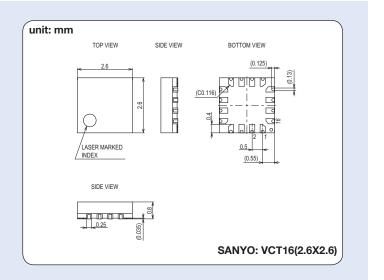
Functions/Features

- Low power dissipation
- Switching among 3 power sources (main battery, button battery, external power supply)
- LDO×3 (2.6V, 3.0V, 3.2V)
- Three voltage detection circuits (2.6V, 2.8V, 2.2V)

	Input voltage		Package	Applications
V _{CC} 1: 2.7V to 4.8V	V _{CC} 2: 3V	V _{CC} 3: 3.5V to 5.2V	VCT16(2.6×2.6)	For DSCs and game machines







Power ICs with a Watchdog Timer Function LA5693AM/93D/93M

Rechargeable Battery Charge Control ICs

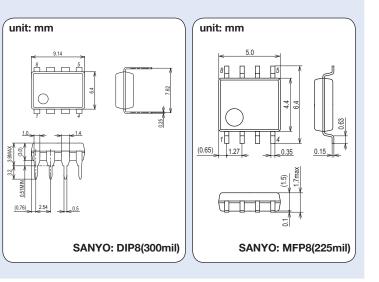
LA5636M

Applications

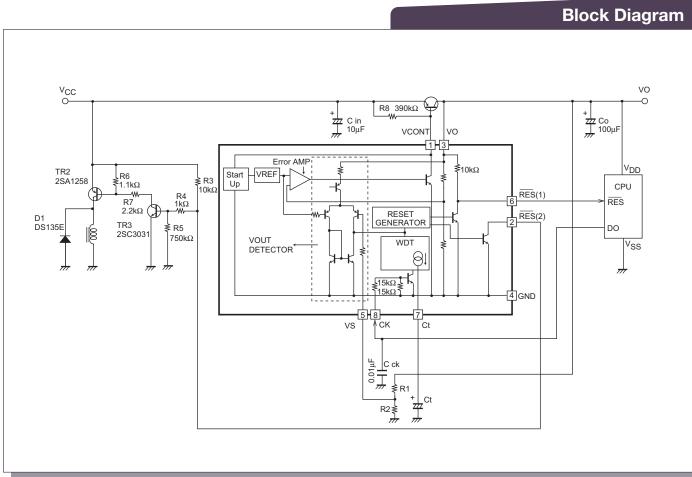
Microcontroller systems for use in automobiles and other industrial equipment

Functions/Features

- An external PNP transistor can be used to provide a low-saturation voltage regulator
- Since the CK input has no edge detector, a high degree of flexibility is allowed in applications (LA5693AM)
- Variable detection voltage (LA5693AM)
- Watchdog time can be made longer (LA5693AM)
 5V output voltage power supply controller
- Sv output voltage power supply controller (LA5693D/93M)
 Drift is such a loss times (LA5692D (2014))
- Built-in watchdog timer (LA5693D/93M)
- Power supply reset signal generation function (LA5693D/93M)
- Reset hold output RES(2) (cleared with CK reinput) (LA5693D/93M)



Absolute maximum ratings input voltage	Total p	ower dissipation	P	Package	Function reset logic output	Watchdog time typ (Ct=2µF)
41V	0.37W 0.5W	(LA5693AM) (LA5693D/93M)	MFP8(225mil) DIP8(300mil)	(LA5693AM/93M) (LA5693D)	Inverted	40ms



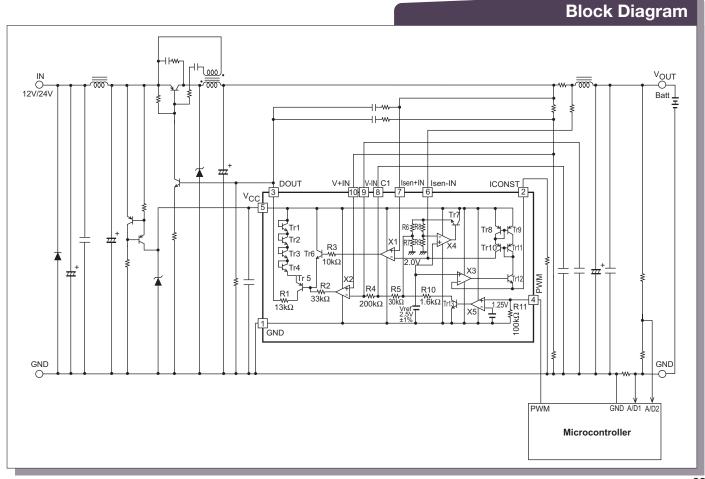
Applications

DC-DC converter secondary side control IC

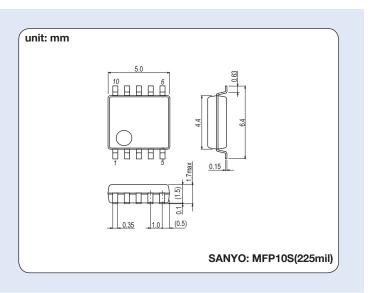
Functions/Features

- Built-in circuit that prevents system malfunction when the input voltage (car battery voltage) falls.
- Provides a constant voltage output that in proportion to the PWM input signal (permits output voltage control by microcontroller)
- High-precision reference current (current control amp) 92.5µA ± 2.7%
- Output voltage can be set through an external resistor.
- Each loop of the voltage amp and current amp is independent.

Battery type	Absolute maximum ratings Input voltage	Total power dissipation	Package
Lithium-ion, nickel-metal hydride	14.5V	0.36W	MFP10S(225







Functions/Features

5mil) Car battery DC-DC converter control IC, output voltage proportional to PWM input signal for charging lithium-ion batteries, etc.

Dedicated Reset Function ICs

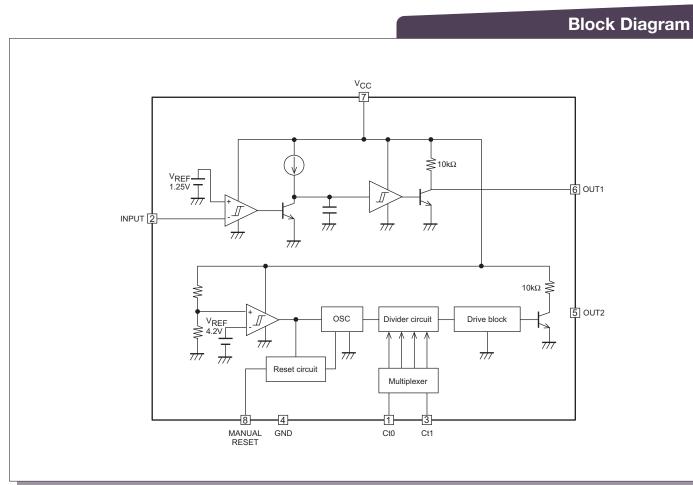
LA5623M

LED Driver ICs LV5215LF

Applications Combination system reset IC Functions/Features Reset circuit (output 1) that detects the input voltage and provides a delay time of 200μs System reset circuit with switchable delay time of 25ms, 50ms, 100ms, and 200ms (output 2) Low minimum operating voltage Both reset 1 and reset 2 have hysteresis characteristics

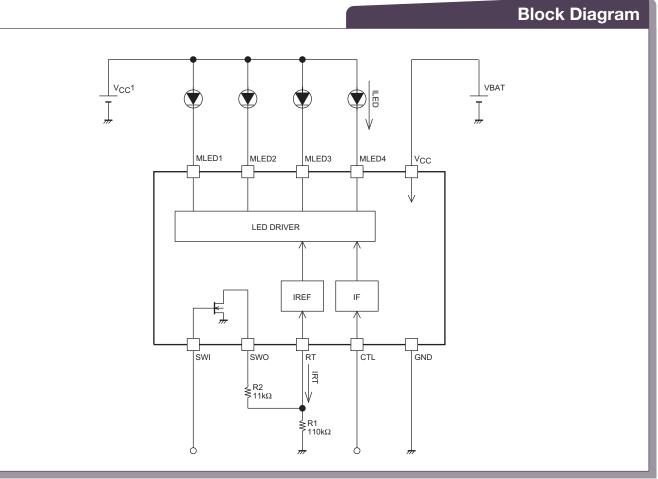
SANYO: MFP8(225mil)

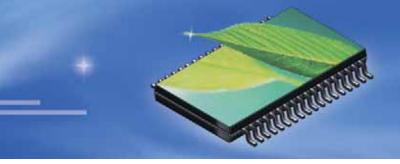
Absolute maximum ratings Input voltage			Functions/Features
-0.3V to +12V	0.3W	MFP8(225mil)	2-system reset IC with built-in 1.25V, and 4.2V reference voltages, delay time 25ms, 50ms, 100ms, or 200ms switchable

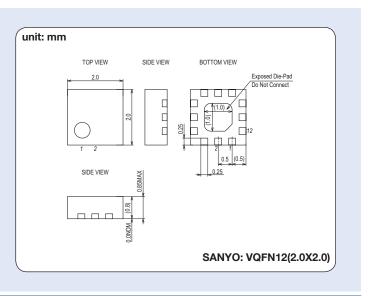


LED driver for use in cell phones Functions/Features Four main LED driver circuits Supports two LED current modes
Four main LED driver circuits
Four main LED driver circuits
• Four main LED driver circuits
• • • • • • • • • • • • • • • • • • • •
 Supports two LED current modes
 Compact package
 Thermal shutdown function

Input voltage	Channels	Package
3.0V to 4.5V	4ch	VQFN12(2.0×2.0)







Circuit Functions and Applications

LED driver for use in cell phones

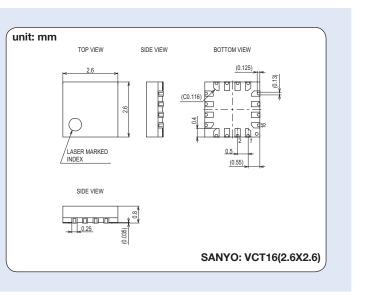
LED Driver ICs LV5217GP

Applications

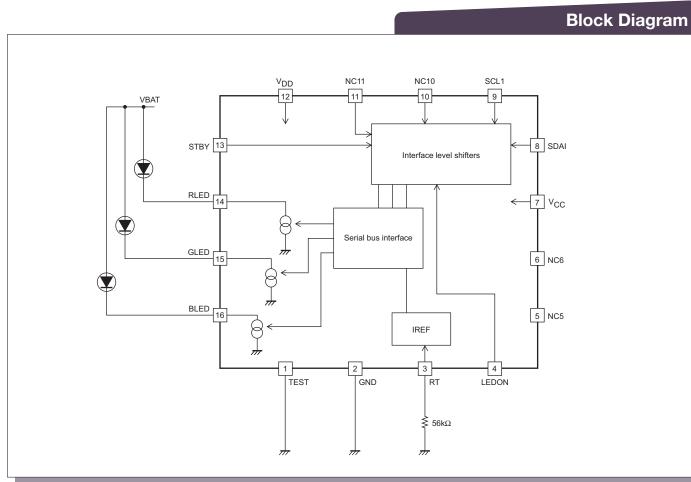
3-channel LED driver for cell phones

■ Functions/Features

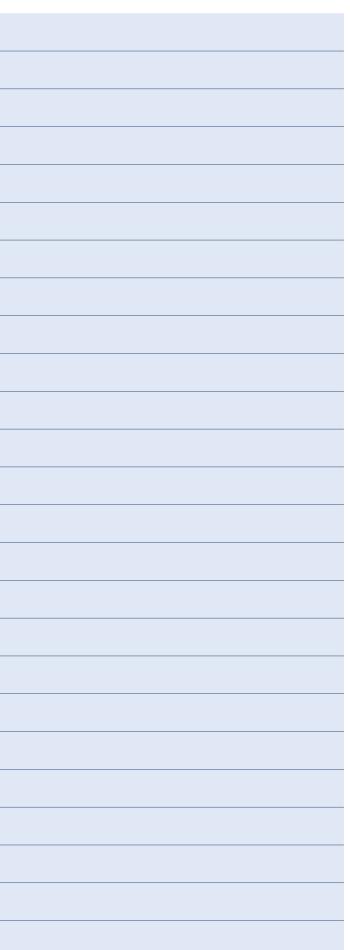
- Three color LED driver circuits
- The LED current can be switched independently in 7-bit units (0.31 to 25.48mA)
- Independent on/off control of three LED drivers (independent control of the 3 RGB colors)
- Each LED driver current level can be adjusted independently over the l²C bus
- Compact package
- Thermal shutdown circuit



Input voltage	Channels	Package	Circuit functions and applications
3.0V to 4.5V	3ch	VCT16(2.6×2.6)	3-channel LED driver for cell phones



MEMO







•SANYO Semiconductor Co.,Ltd. Website http://www.semic.sanyo.co.jp/index_e.htm

SANYO Semiconductor Co., Ltd.

This catalog provides information as of June, 2008. Specifications and information herein are subject to change without notice.